

Watershed Alliance for the Greater Zumbro River

GIS Approach

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February 9, 2023



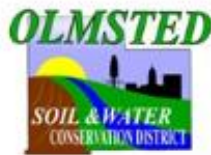
About the Project

The Greater Zumbro River Comprehensive Watershed Management Plan was developed through the One Watershed, One Plan (1W1P) program. The program supports local partnerships to develop a prioritized, targeted, and measurable action plan for the watershed.

The Plan aims to:

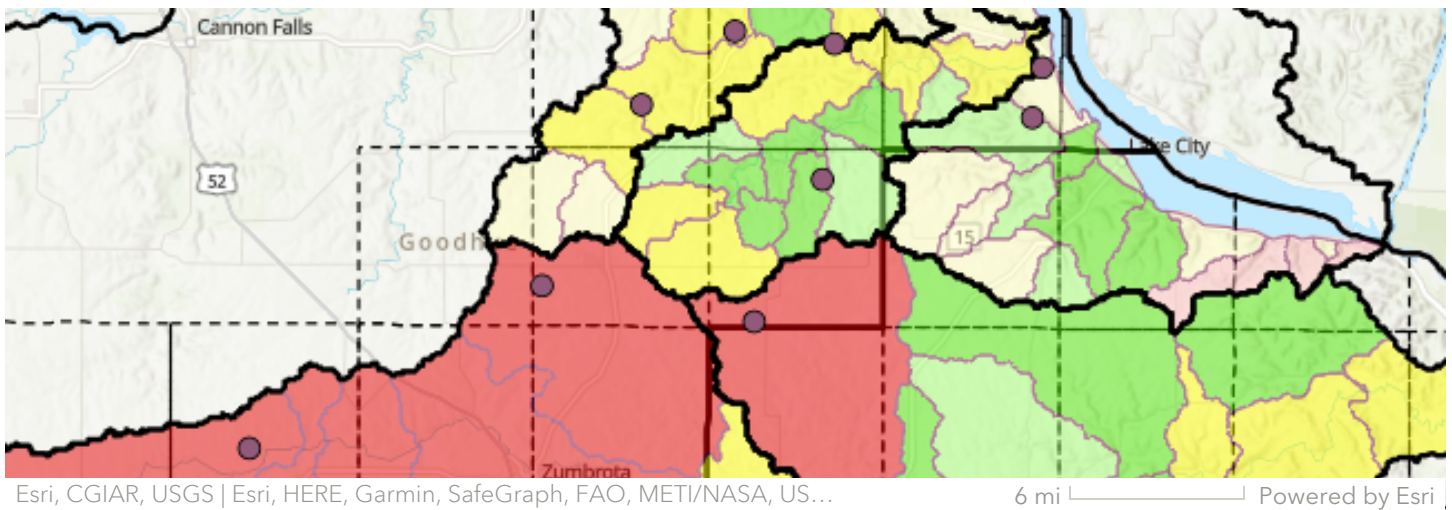
- Bring neighbors together to work where it's most important in the watershed.
- Set measurable goals by identifying and prioritizing resources and issues.
- Address water quality and quantity, groundwater, drinking water, habitat, recreation, and other issues.
- Create opportunities for collaboration and dialogue between local partners, state agencies, and the public.

- Utilize data and strategies, and implement local solutions to meet our water management goals.



Partners

The Watershed Alliance for the Greater Zumbro is a partnership between the Counties and Soil & Water Conservation Districts of Dodge, Goodhue, Olmsted, Rice, Wabasha, Steele, the Bear Valley Watershed District and the City of Rochester.



Watershed Area

The watershed area covers approximately **1421 square miles** of the Zumbro River watershed and **233 square miles** of the Mississippi River Lake Pepin watershed. Boundaries fall within portions of Dodge, Goodhue, Olmsted, Rice, Steele, and Wabasha Counties.

m MINNESOTA GEOSPATIAL COMMONS

Categories Organizations Resources News Help About

Featured Resource: Land Application Sites in Minnesota

This dataset represents the locations of land application sites that are regulated by the Minnesota Pollution Control Agency. Land application is the process of incorporating products such as manure, petroleum contaminated soil, or selected industrial by products to agricultural land for treatment by natural processes.

[Learn more](#)

Search the Commons

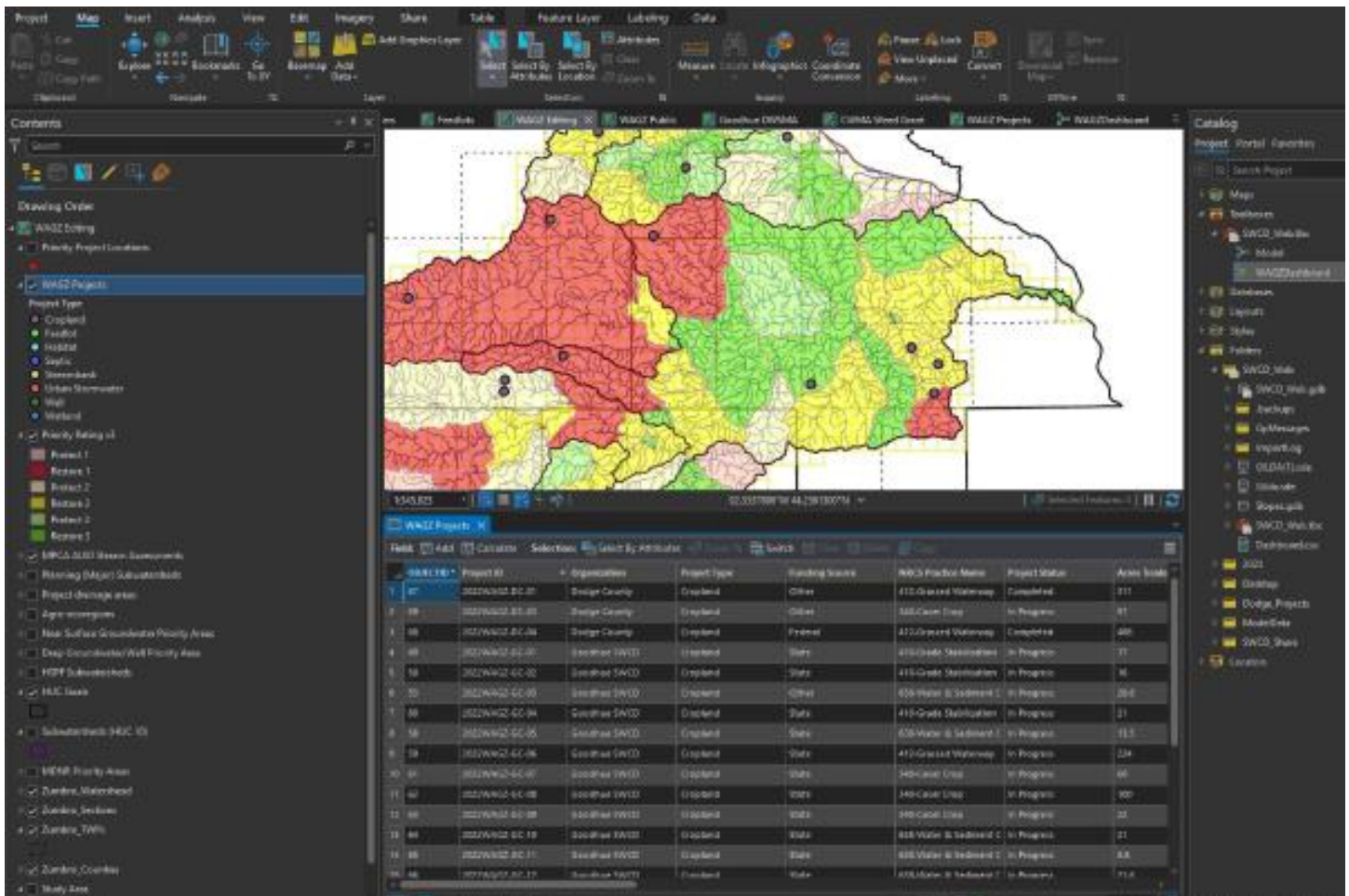
Minnesota Geospatial Commons

The Minnesota Geospatial Commons is a collaborative space for users and publishers of Minnesota's geospatial resources. The Commons is used by researchers, cartographers, web and application developers, journalists, planners, and other citizens who need GIS data for a project.

Featured Categories

GIS Process

Gathered PLSS information about the surrounding counties



GIS Process

Created editable data for project tracking. The process was broken into two components since one was capturing in field information, where as the calculations for cleanup happen after.

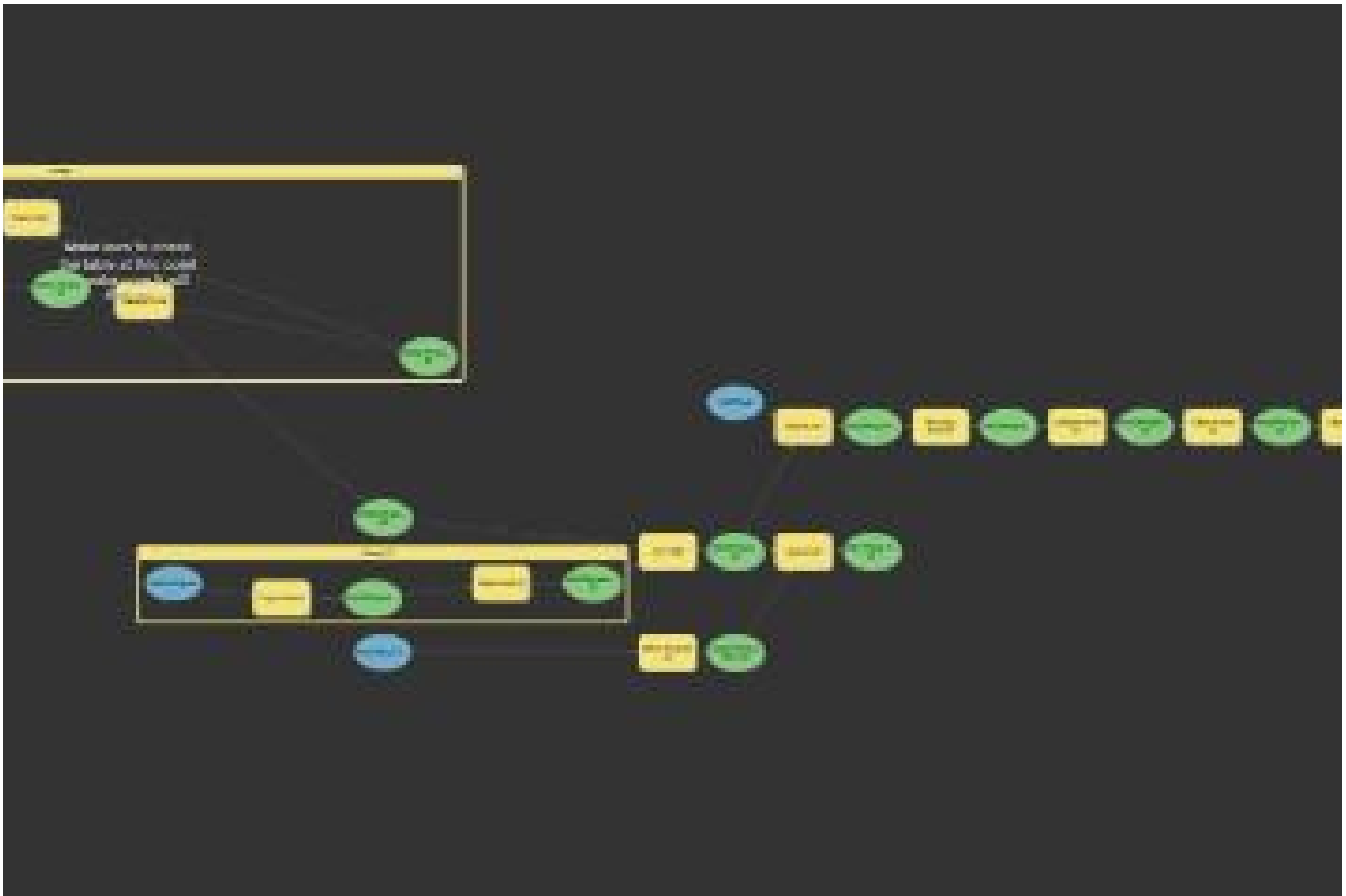
The screenshot displays the ArcGIS Online interface for the 'Watershed Alliance for the Greater Zumbro River' group. The top navigation bar includes 'Notebook', 'Groups', 'Content', and 'Organization'. The 'Content' tab is active, showing a list of 36 items. The right sidebar shows the 'Overview' tab for the group, displaying a search bar and a list of 7 members.

1 - 20 of 36 in All my content	
<input type="checkbox"/>	Title
<input type="checkbox"/>	Watershed Alliance for the Greater Zumbro River StoryMap
<input type="checkbox"/>	Huc Goals Dashboard Table (hosted)
<input type="checkbox"/>	WAGZ Editing Map Web Map
<input type="checkbox"/>	WAGZ Public Map Web Map
<input type="checkbox"/>	Huc Goals Dashboard Microsoft Excel
<input type="checkbox"/>	WAGZ Projects_Public Feature layer (hosted)
<input type="checkbox"/>	WAGZ Projects_Public Service definition
<input type="checkbox"/>	WAGZ Projects_Edit Feature layer (hosted)
<input type="checkbox"/>	WAGZ Projects_Edit Service definition
<input type="checkbox"/>	WAGZ Mapping Feature layer (hosted)
<input type="checkbox"/>	WAGZ Dashboard Dashboard
<input type="checkbox"/>	WAGZ Public Feature layer (hosted)

1 - 7 of 7			
<input type="checkbox"/>	Name	Group role	Affiliati
<input type="checkbox"/>	City of Rochester City_Rochester	Member	My Org
<input type="checkbox"/>	Rice County Rice_County_User	Member	My Org
<input type="checkbox"/>	Wabasha SWCD Wabasha_SWCD	Member	My Org
<input type="checkbox"/>	Dodge County Dodge_County_GIS	Member	My Org
<input type="checkbox"/>	Olmsted SWCD Olmsted_SWCD	Member	My Org
<input type="checkbox"/>	Beau Kennedy bkennedy_GoodhueCo	Member	My Org
<input type="checkbox"/>	Bryan Byholm bryan.byholm_Goodhu	Owner	My Org

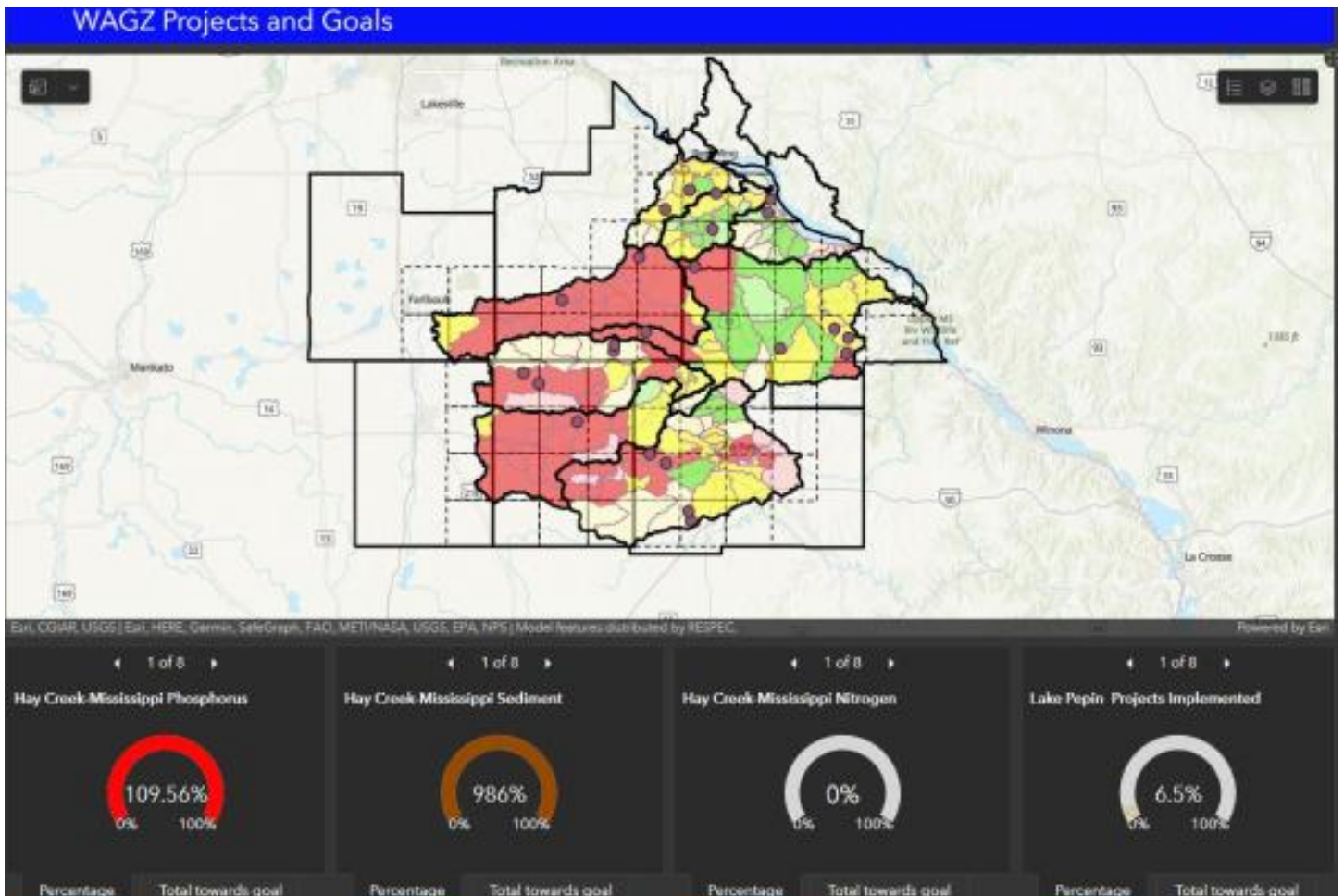
GIS Process

Published data to AGOL and then created multiple users for the separate counties



GIS Process

Created a process to merge the calculated table data with the field data.



GIS Process

All of this culminates into a public viewer that shows the percentage of the projects completion based on the watershed level

WAGZ Dashboard

WAGZ Dashboard for showing information

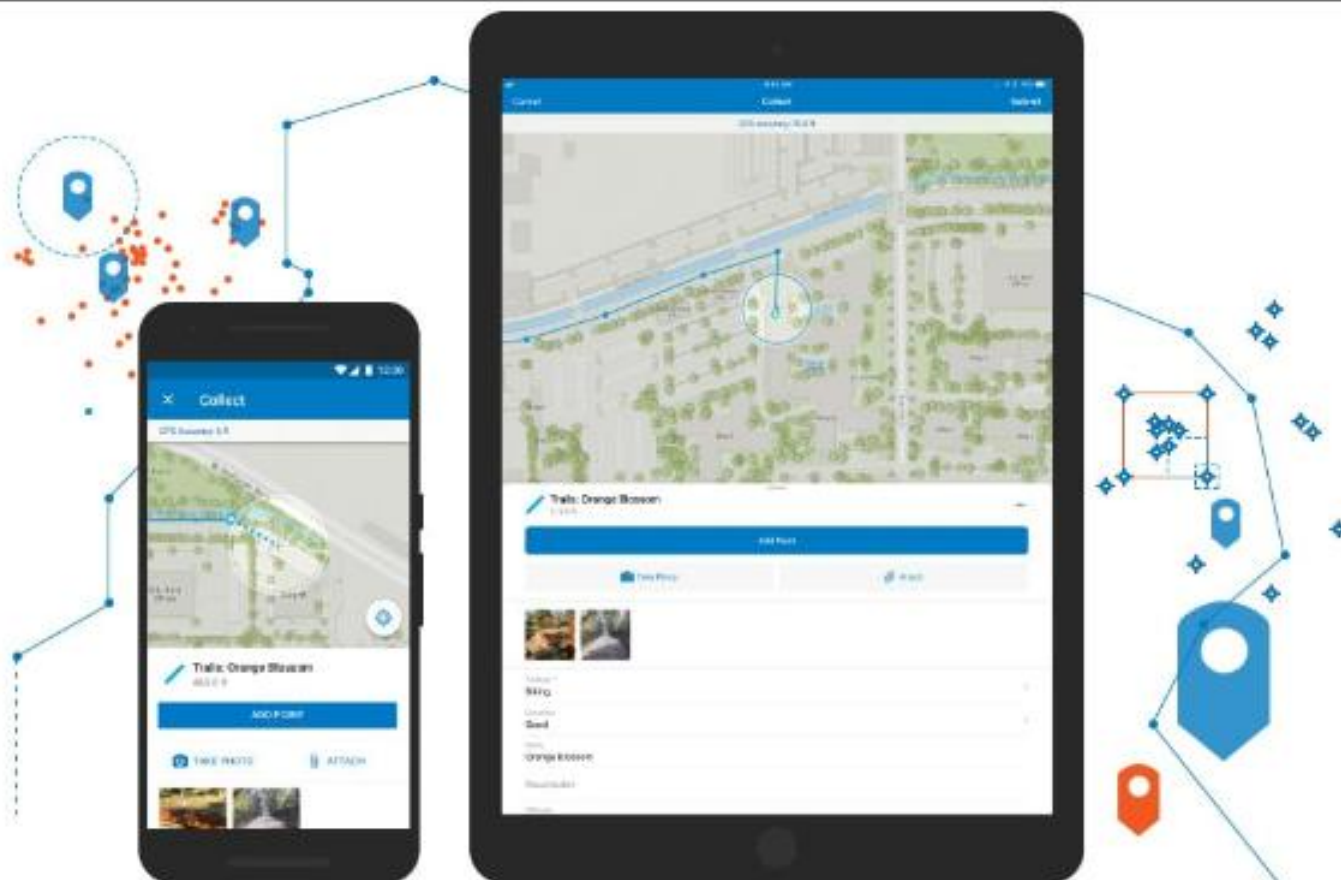
<https://goodhueco.maps.arcgis.com/apps/dashboards/7ff48844a8ea401ab6234fe4543399ae>



Problems with Collection and Collaboration

Working with multiple agencies

sheer distance between the counties and the disparate nature of working with GIS departments and SWCD workers



Learning curve for users

need to make sure all users understand how to collect data and enter the correct information

The image shows two side-by-side screenshots from an ArcGIS Story Maps interface. The left screenshot displays the 'Data options' configuration panel for a gauge chart. It includes sections for 'Gauge' (Settings), 'General' (Layer: Huc Goals Dashboard - Sheet1, Filter, Value type: Feature, Value field: P Percent, Value conversion: off, Sort by: HUC, Maximum features displayed: 50, Minimum value), and 'Data options'. The right screenshot shows a gauge chart titled 'Hay Creek-Mississippi Phosphorus' with a red arc and a central value of 109.56%. The arc is labeled with 0% and 100% at its ends. The chart is part of a story map with 8 slides, currently on slide 1.

Learning curve for for myself

Dashboard creation

Getting Data to the correct location

Making sure the log in information works

Things learned from Collection and Collaboration

- Working with agencies is easier due to better connectivity
- Being as flexible as possible is key
- "Take Command"

Watershed Alliance for the Greater Zumbro River

Follow along with us as we work together to implement the WAGZ Comprehensive Watershed Management...

<https://storymaps.arcgis.com/collections/e1099a1b459a4fb1a5dd5a2cf7d133da>

Questions?

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